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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,373	01/15/2004	Prashant Anil Tatake	132978-2	5423
43248	7590	02/28/2005	EXAMINER	
CANTOR COLBURN LLP 55 GRIFFIN RD SOUTH BLOOMFIELD, CT 06002			SHIPPEN, MICHAEL L	
			ART UNIT	PAPER NUMBER
			1621	

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/758,373

Applicant(s)

TATAKE ET AL.

Examiner

MICHAEL L. SHIPPEN

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/15/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112¹

Claims 5 and 6 are rejected under 35 USC 112, fourth paragraph, as failing to further limit parent claim 4. Claim 4 refers to a "batch" process and as such claims 5 and 6, drawn to a "continuous" process, fail to limit the parent claim.

Claim Rejections - 35 USC § 102²

Claims 1, 3-11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 1,108,584 in view of USP 3,029,294³. While the reference does not discuss the presence of acetol or the reduction of acetol and methylbenzofuran, the processes exemplified in the reference are within the purview of the instant claims. As seen from

¹ The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 112 that form the basis for the rejections under this section made in this Office action:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

A claim may be written in independent or, if the nature of the case admits, in dependent or multiple dependent form.

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

² The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

³ USP 3,029,294 is not relied upon here as prior art but rather as evidence that the GB 1,108,584 distilled phenol inherently contains acetol and methylbenzofuran.

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USP 3,029,294 (note the phenol product obtained by distillation in the examples) these impurities are present in the phenol obtained by the same method that was used by GB 1,108,584 to obtain phenol to be further purified in the examples. The claimed process step is the same as shown in the examples of GB 1,108,584. As such the prior art inherently carried out the claimed process. It is further noted that the claim language of "about 90°C" of claim 8 reads on the 95°C used in the examples of GB 1,108,584.

Claims 1-7 and 9-15 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 1,381,398. Note Example II.

Claims 1-5, 7-11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 6,388,144. Note in Tables 6 and 7 wherein the process was carried out at 95°C. It is further noted that the claim language of "about 90°C" of claim 8 reads on the 95°C used in the examples.

Claims 1 and 3-15 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 6,489,519. Note the treatment of the phenol in lines 36 to 62 of column 6. It is noted that some of the claims recite "one-step"; however, there is no requirement in the claims that excludes any preliminary steps that may be set forth in the prior art.

Claims 1-11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 5,414,154. Note Tables I and III of Examples 1 and 3.

Claim Rejections - 35 USC § 103⁴

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1,108,584 in view of USP 3,029,294. The references are applied as above. As to the claims that recite the amounts of acetol and methylbenzofuran, it would be obvious to one of ordinary skill in the art that impure phenols other than the phenol actual exemplified could be treated in the same manner as taught in the reference including phenols having impurities falling with the claimed range. As to the claims that require a the treated phenol to be distilled, the reference clearly suggest this embodiment, note the reference indicates that the water in the treated phenol may be removed by distillation at lines 116 to 120 of page 2. As to the claims that recite specific reaction conditions, it is well within the skill of the artisan to operate within the parameters suggested by the disclosure of the reference and carry out the prior art process with the expectation that one will obtain the results taught in the reference. The optimization of reaction conditions for a particular reaction system to optimize a result is well within the skill of the artisan through routine experimentation, *In re Aller*, 105 USPQ 233.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1,381,398. The reference is applied as above. As to the claims that recite specific reaction conditions, it is well within the skill of the artisan to operate within the

⁴ The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

parameters suggested by the disclosure of the reference and carry out the prior art process with the expectation that one will obtain the results taught in the reference. The optimization of reaction conditions for a particular reaction system to optimize a result is well within the skill of the artisan through routine experimentation, *In re Aller, supra*.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 6,489,519. The reference is applied as above. As to the claims that recite specific amounts of acetol and methylbenzofuran, it would be obvious to one of ordinary skill in the art that other impure phenols other than the phenol actual exemplified could be treated in the same manner as taught in the reference including phenols having impurities falling with the claimed range. As to the claims that recite specific reaction conditions, it is well within the skill of the artisan to operate within the parameters suggested by the disclosure of the reference and carry out the prior art process with the expectation that one will obtain the results taught in the reference. The optimization of reaction conditions for a particular reaction system to optimize a result is well within the skill of the artisan through routine experimentation, *In re Aller, supra*.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,414,154. The reference is applied as above. As to the claims that require the treated phenol to be distilled, the reference clearly suggests this embodiment, note the reference indicates that the treated phenol is to be distilled in lines 63 and 64 of column 1. As to the claims that recite specific reaction conditions, it is well within the skill of the artisan to operate within the parameters suggested by the disclosure of the reference and carry out the prior art process with the expectation that one will obtain the results

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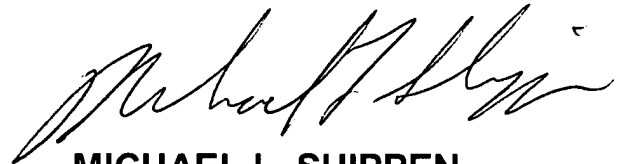
taught in the reference. The optimization of reaction conditions for a particular reaction system to optimize a result is well within the skill of the artisan through routine experimentation, *In re Aller, supra*

Conclusion

The remaining reference is cited as of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Michael L. Shippen** whose telephone number is **(571) 272-0647**. The Examiner's normal tour of duty is 7:30 AM to 4:00 PM. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is **(571) 272-1600**. The official group FAX machine number is **571-273-8300**.

MShippen
February 20, 2005

A handwritten signature in black ink, appearing to read "Michael L. Shippen", written in a cursive style.

**MICHAEL L. SHIPPEN
PRIMARY EXAMINER
ART UNIT 1621**